

What is claimed is:

1. A cable system for downhole use, comprising cable and a magnetic-permeability element configured along a length of the cable, wherein said magnetic-permeability element comprises a material having a relative magnetic permeability $\mu_{r,m}$ of at least 2,000, and wherein the magnetic-permeability element is provided as a strip extending along at least part of the length of the cable wherein said strip comprises multiple layers of sheet of said material.

2. The cable system of claim 1, the material having an EM contrast ratio of at least $50 \mu\Omega^{-1}\cdot\text{cm}^{-1}$, wherein said EM contrast ratio is defined as $\mu_{r,m}\cdot\sigma_m$, wherein σ_m is electrical conductivity of the material.

3. The cable system of claim 1, the material having relative magnetic permeability μ_r of at least 4,000.

4. The cable system of claim 1, wherein the material is selected from the group consisting of: mumetal, permalloy, and electrical steel.

5. The cable system of claim 1, wherein the material comprises electrical steel.

6. The cable system of claim 1, wherein said strip comprises a laminate of said multiple layers of sheet.

7. The cable system of claim 1, wherein the cable is a fiber-optic cable comprising a fiber optic line.

8. The cable system of claim 7, wherein the magnetic-permeability element and the fiber optic line are encapsulated together within an encapsulation.

9. The cable system of claim 1, wherein the magnetic-permeability element is configured external to the cable.

10. The cable system of claim 1, wherein the cable and the magnetic-permeability element are arranged on one side of a metal wall.

11. The cable system of claim 10, wherein said relative magnetic permeability $\mu_{r,m}$ of at least 2,000 exceeds a relative magnetic permeability $\mu_{r,w}$ of said metal wall.

12. The cable system of claim 10, wherein an EM contrast ratio of the material exceeds the EM contrast ratio of said metal wall, wherein EM contrast ratio of the material is defined as $\mu_{r,m}\cdot\sigma_m$, and wherein EM contrast ratio of the metal wall is defined as $\mu_{r,w}\cdot\sigma_w$ wherein σ_m is an electrical conductivity of the material and σ_w is an electrical conductivity of the metal wall.

13. The cable system of claim 10, further comprising a magnetic orienting tool positioned on a second side of said metal wall opposite from said one side to locate the magnetic-permeability element through the metal wall.

14. The cable system of claim 10, wherein a target-to-background ratio of equivalent inductive mass of the cable relative to the metal wall exceeds 5.

15. The cable system of claim 10, wherein said metal wall comprises a wall of a wellbore tubular.

16. A method of perforating a wellbore, comprising:

providing a cable system for downhole use, comprising cable and a magnetic-permeability element configured along a length of the cable, wherein said magnetic-permeability element comprises a material having a relative magnetic permeability $\mu_{r,m}$ of at least 2,000, and wherein the magnetic-permeability element is provided as a strip extending along at least part of the length of the cable wherein said strip comprises multiple layers of sheet of said material;

providing a wellbore tubular downhole, said wellbore tubular comprising a metal wellbore tubular wall whereby the cable system is arranged on an outside of said wellbore tubular;

lowering a magnetic orienting tool into the wellbore tubular;

locating the cable system through the metal wellbore tubular wall with the magnetic orienting tool;

subsequently perforating the metal wellbore tubular wall away from the cable system.

17. The method of claim 16, the material having relative magnetic permeability μ_r of at least 4,000.

18. The method of claim 16, wherein the material is selected from the group consisting of: mumetal, permalloy, and electrical steel.

19. The method of claim 16, wherein the material comprises electrical steel.

20. The method of claim 16, wherein said strip comprises a laminate of said multiple layers of sheet.

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